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APPLICATION NO.		FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/720,422		11/24/2003	Eugene O. Curatu	2154US	5114
26356	7590	09/25/2006		EXAMINER	
ALCON			PHAM, HOA Q		
IP LEGAL, TB4-8 6201 SOUTH FREEWAY				ART UNIT	PAPER NUMBER
FORT WOR	FORT WORTH, TX 76134			2877	
			DATE MAILED: 09/25/2006		

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)					
Office Action Summer.	10/720,422	CURATU, EUGENE O.					
Office Action Summary	Examiner	Art Unit					
	Hoa Q. Pham	2877					
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the	correspondence address					
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period w - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION (16(a). In no event, however, may a reply be to the apply and will expire SIX (6) MONTHS from the application to become ABANDON	N. imely filed n the mailing date of this communication. ED (35 U.S.C. § 133).					
Status							
1) Responsive to communication(s) filed on 25 Ju	lv 2006						
· · · · <u> </u>	action is non-final.						
3) Since this application is in condition for allowan		rosecution as to the merits is					
closed in accordance with the practice under E							
Disposition of Claims							
4)⊠ Claim(s) <u>30-48</u> is/are pending in the application							
4a) Of the above claim(s) is/are withdrawn from consideration.							
5) Claim(s) is/are allowed.							
6)⊠ Claim(s) <u>30-48</u> is/are rejected.							
7) Claim(s) is/are rejected.							
8) Claim(s) are subject to restriction and/or	election requirement						
,	election requirement.						
Application Papers							
9) The specification is objected to by the Examine							
10)⊠ The drawing(s) filed on <u>7/25/06</u> is/are: a)⊠ accepted or b)□ objected to by the Examiner.							
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).							
Replacement drawing sheet(s) including the correcti	on is required if the drawing(s) is o	bjected to. See 37 CFR 1.121(d).					
11) ☐ The oath or declaration is objected to by the Ex	aminer. Note the attached Offic	e Action or form PTO-152.					
Priority under 35 U.S.C. § 119							
 12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of: 1. Certified copies of the priority documents 2. Certified copies of the priority documents 3. Copies of the certified copies of the prior application from the International Bureau * See the attached detailed Office action for a list of 	have been received. have been received in Applica ity documents have been receiv (PCT Rule 17.2(a)).	tion No ved in this National Stage					
Attachment(s)							
Notice of References Cited (PTO-892)	4) Interview Summar						
2) Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail [5) Notice of Informal						
Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date	6) Other:	Tatom Application					

Art Unit: 2877

DETAILED ACTION

Drawings

1. Drawings filed on 7/25/06 have been accepted.

Claim Rejections - 35 USC § 112

- 2. The following is a quotation of the second paragraph of 35 U.S.C. 112:
 - The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
- 3. Claim 44 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 44 recites the limitation "the optical element" in line 6. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 103

- 4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 5. Claims 30-48 are rejected under 35 U.S.C. 103(a) as being unpatentable over Martino (6,637,884).

Regarding claims 30, 31, 33, 34, 35, 37, 39 and 43; Martino discloses an aberrometer calibration comprises an optical element (32) insertable into an optical path

(40) of a wavefront analyzer (10), the optical element (32) adapted to induce a predetermined aberration in a wavefront for presentation to the wavefront analyzer (figure 2, column 3, line 63 through column 4, line 25). Martino teaches that the calibration component comprises a well characterized test optic or model eye having a known wavefront aberration, or having known plus or minus dioptric power and the desired measurement parameter is a **refractive** calibration (column 2, lines 5-31). Martino does not explicitly teach the use of a hologram; however, it would have been obvious to one having ordinary skill in the art at the time the invention was made to use any types of calibration component, for example, a hologram as now claimed by the present invention, because it does not matter what types of calibration components, the device would function in the same manner.

Regarding claims 38 and 45, figure 2 shows a collimated lens (14).

Regarding claim 40, column 3, line 1, teaches the use of a Shack-Hartmann aberrometer.

Regarding claims 32, Martino teaches that the information is processed and typically fit to Zernike polynomials to output the aberration coefficients measurements (column 3, lines 23-27).

Regarding claims 41-42, 46-47; Martino teaches calibration component for calibrating a Shack-Hartmann type wavefront sensing device (column 1, lines 29-35 and column 3, line 1) and does not discloses a details of the Shack-Hartmann device.

However, such a structure is well known in the art. It would have been obvious to one having ordinary skill in the art at the time the invention was made to use the basic

device of Martino for calibrating any types of Shack-Hartmann device, for example, a Shack-Hartmann device claimed by the present invention, because the steps of calibration are similar.

Regarding claims 36, 44, and 48; Martino teaches that the term "dioptric power" as used herein refer to (+/-) spherical defocus measured in diopters as is produced by a spherical convex lens or concave lens. Thus, it would have been obvious to one having ordinary skill in the art at the time the invention was made to replace the convex lens or concave lens by a hologram because they are equivalent in function.

Response to Arguments

- 6. Applicant's arguments filed 7/25/06 have been fully considered but they are not persuasive.
- a. The new claims 30-48 are similar to original claims 1-6, 9-10, 12-13, 15-25, except that the terms "an optical element" are replaced by "a hologram". Applicant argues that the new claims overcome the reference Martino or William et al. The argument is not persuasive because applicant argued on the rejection under 35 U.S.C 102 and overlooks the rejection under 35 U.S.C 103 (see paragraph # 5 of the previous Office action). Since Martino teaches that the calibration component comprises a well characterized test optic or model eye having a known wavefront aberration, or having known plus or minus dioptric power and the desired measurement parameter is a refractive calibration (column 2, lines 5-31), it would have been obvious to one having ordinary skill in the art at the time the invention was made

Art Unit: 2877

to use any types of calibration component, for example, a hologram as now claimed by the present invention, because it does not matter what types of calibration components, the device would function in the same manner. A substitution one for another is generally recognized as being within the level of ordinary skill in the art.

- b. Applicant did not response to the rejection under 35 U.S.C 103, for example, why the rejection is not proper.
- c. As mentioned in the specification or original claims 1, 2 and 7-9; the "hologram" is not a critical feature of the claimed invention because the "optical element" could be used as "a hologram" (claim 2), "a lens" (claim 7), "a group of lenses" (claim 8) or "a spatial light modulator" (claim 9), etc...

In view of the foregoing, it is believed that the rejection under 35 U.S.C 103 is proper.

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the

Application/Control Number: 10/720,422 Page 6

Art Unit: 2877

shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hoa Q. Pham whose telephone number is (571) 272-2426. The examiner can normally be reached on 7:30AM to 6 PM, Monday through Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gregory J. Toatley, Jr. can be reached on (571) 272-2800 ext. 77. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Hoa Q. Pham Primary Examiner Art Unit: 2877

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> Hoa Q. Pham Primary Examiner

Art Unit 2877

HP January 21, 2006